## REMARKS

Claims 1-11 are all the claims pending in the application.

Claims 1-11 are rejected under 35 U.S.C. § 102(e) as being anticipated by Crinon et al. (US 6,249,613).

The present invention relates to a decoder for implementing an image stabilization and a digital image stabilization method using an additional information extracted from a coded bit stream.

Crinon relates to mosaic generation and sprite-based coding with automatic foreground and background segmentation. In an automatic segmentation system according to Crinon, foreground and background objects are distinguished by first encoding and decoding a first image at a first time reference. Macroblocks are extracted from a second image at a second time reference. The macroblocks are mapped to pixel arrays in the decoded first image. Frame residuals are derived that represent the difference between the macroblocks and the corresponding pixel arrays in the previously decoded image. A global vector representing camera motion between the first and second images is applied to the macroblocks in the second image. The global vectors map the macroblocks to a second pixel array in the first decoded image. Global residuals between the macroblocks and the second mapped image arrays in the first image are derived. The global residuals are compared with the frame residuals to determine which macroblocks are classified as background and foreground. The macroblocks classified as foreground are then blended into a mosaic.

Applicant respectfully traverses the rejection with the following comments.

3

Applicant submits that Crinon does not teach or suggest the time-based integration unit

for receiving a global motion vector from the global motion computation unit and time-

integrating the global motion vector based on a frame type, as recited in claim 1. In the Office

Action, the Examiner points to the Foreground/Background Segmentation & Mosaic Update Unit

43 (FIG. 5B) as allegedly corresponding to the claimed time-based integration unit. Also, the

Examiner cites col. 6, lines 51-67. The cited excerpt discloses the following:

> *The residual signal and macroblock type used by decoder 39 are also*
> *passed to the foreground/background segmentation and mosaic update unit 49 to*
> *classify the macroblocks as foreground or background. The output of the global*
> *residual computation unit 31 is also input to the mosaic update unit 49. The exact*
> *same rules are used as in the encoder to derive the foreground/background*
> *segmentation map. Specifically, decoded INTER1V prediction type macroblocks*
> *are classified as foreground when the global motion estimation residuals*
> *GMER(j,k) are greater than the portion of the INTER1V residual RES(j,k).*
> *Otherwise, the assembled macroblocks are classified as background. Decoded*
> *INTRA and INTER4V macroblock types are classified as foreground. MOSAIC*
> *and SKIP macroblocks are classified as background. The mosaic update unit 49*
> *updates the mosaic 22 with assembled macroblocks classified as background.*

Thus, as shown above, there is no discussion or suggestion of time-based integration in

the cited excerpt. Instead, the excerpt discloses that the mosaic update unit classifies the

macroblocks as foreground or background using the residual signal and macroblock type. Such a

disclosure fails to describe time-integrating the global motion vector based on a frame type.

Therefore, claim 1 is not anticipated by Crinon.

Further, since Crinon does not disclose the claimed time-based integration unit, Crinon

must also fail to disclose the global motion compensation unit for stabilizing a recovery image

using a global motion vector integrated by the time-based integration unit claimed in claim 1.

Moreover, the Examiner has cited the macroblock decoder and assembler 39 and the

mosaic decoder 45 as allegedly corresponding to the VLD recited in claim 1, as well as

corresponding to the global compensation unit recited in the claim. Applicant submits that this is an improper double counting of elements.

For the foregoing reasons, claim 1 is not anticipated by Crinon.

Claims 2-6 are not anticipated at least because of their dependence from claim 1.

Applicant submits that claims 7-11 are not anticipated by Crinon for reasons analogous to those for claims 1-6.

With further regard to claims 4 and 9, Crinon fails to teach or suggest all of the limitations of these claims. Claim 4 recites a similar motion estimation unit for separating the local motion vectors extracted from the local motion vector detector into a certain number of clusters. The Examiner asserts that Crinon discloses this feature of the claims at col. 7, lines 36-56, but Applicant disagrees. After reviewing the cited excerpt and the remainder of the reference, it appears that Crinon is silent with regard to a similar motion estimation unit for separating the local motion vectors extracted from the local motion vector detector into a certain number of clusters. Thus, claim 4 and, for analogous reasons, claim 9 are not anticipated by Crinon for this reason also.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880.  Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone:  (202) 293-7060
Facsimile:  (202) 293-7860

WASHINGTON OFFICE

23373
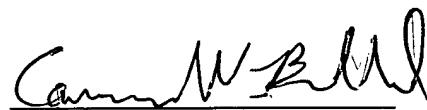
CUSTOMER NUMBER

Cameron W. Beddard
Registration No. 46,545

Date:  July 29, 2004

6